From: McCarter, Jennifer
To: Bailley, Treasure; Jacobson, Linda; Churchill, Stephen
Cc: jill.parisi; Kilty, Quinn V; Bloomberg, Jon H; Bodry, Renee A; Reeves, Molly; Rohr, Matthew; Munoz, Emily
Subject: RE: Comanche Phase 2 drilling update
Date: Thursday, January 7, 2021 11:47:31 AM
Attachments: ATT00001.txt

Hi Treasure, all – update below on Phase 2 drilling and development.

- 7 wells installed; two remain dry
- Plan to sample next week
- Wells have been surveyed, but results are pending, expected end of week. We will provide update once that data is compiled.

Well development status (all screened in weathered shale)

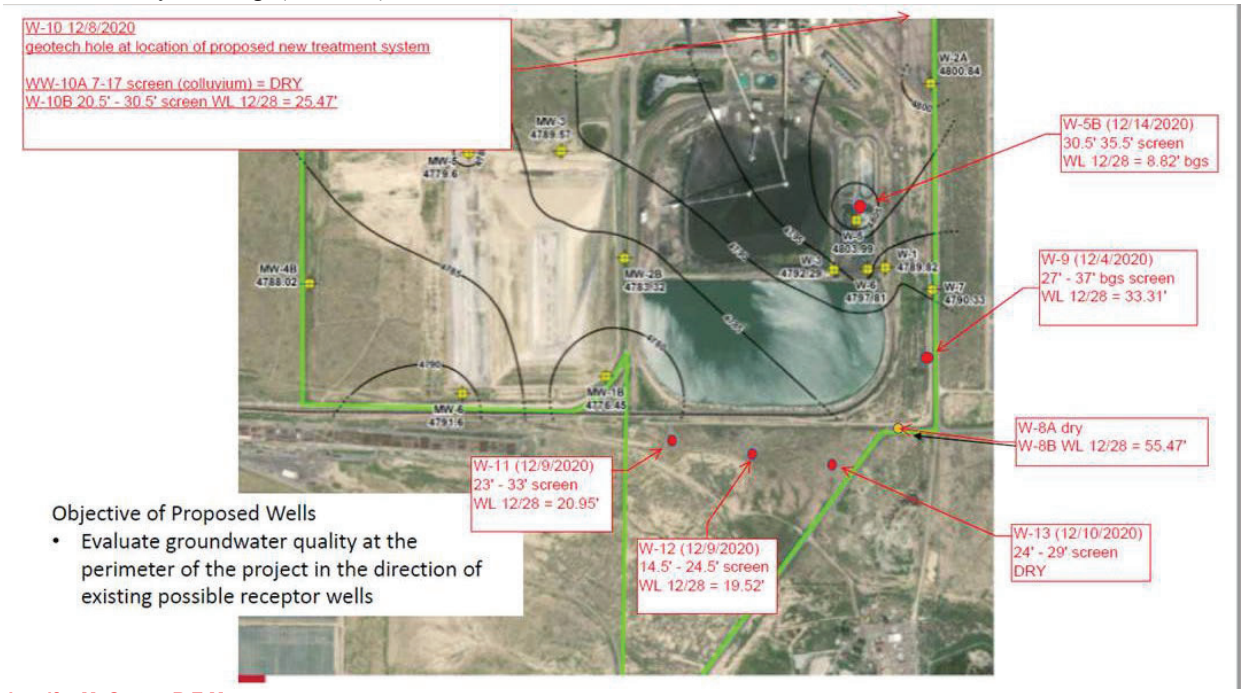
- W-5B 481 liters purged, final turbidity 5.02 NTU
- W-9 230 liters purged, final turbidity 7.55 NTU
- W-11 136 liters purged, final turbidity 3.47 NTU
- W-12 420 liters purged, final turbidity 2.69 NTU
- W-10B turbidity still mostly out of range (>1,100 NTUs); purges dry and ~ 10 bore volumes/63 liters removed

Water levels 12/28
W-5B 8.82 ft bgs
W-5 4.94 ft bgs (original shallow well for comparison)
W-9 33.31 ft bgs
W-10A dry
W-10B 25.47 ft bgs
W-11 20.95 ft bgs
W-12 19.52 ft bgs
W-13 dry
Other locations

- W-8B rising slowly, up to 55.47 ft btoc (from 55.68' on 8/25)
- W-8A is still dry

Woodward Clyde borings (1987)

- TH-184 dry 16.62' bgs (alluvium)
- TH-185 dry 5.91 ft bgs (colluvium)



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From: Bailley, Treasure <Bailley.Treasure@epa.gov>

Sent: Monday, December 28, 2020 10:37 AM
To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>; Jacobson, Linda <Jacobson.Linda@epa.gov>; Churchill, Stephen <Churchill.Stephen@epa.gov>
Cc: jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>; Bloomberg, Jon H <Jon.H.Bloomberg@xcelenergy.com>; Bodry, Renee A <Renee.A.Bodry@xcelenergy.com>; Reeves, Molly <Molly.Reeves@hdrinc.com>; Rohr, Matthew <Matthew.Rohr@hdrinc.com>; Munoz, Emily <Emily.Munoz@hdrinc.com>
Subject: RE: Comanche Phase 2 drilling update

Thank you, Jennifer.
I look forward to seeing the updated groundwater contours and following-up on this when everyone is back in the office.
Happy New Year!
Treasure

From: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>
Sent: Friday, December 18, 2020 10:42 AM
To: Bailley, Treasure <Bailley.Treasure@epa.gov>; Jacobson, Linda <Jacobson.Linda@epa.gov>; Churchill, Stephen <Churchill.Stephen@epa.gov>
Cc: jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>; Bloomberg, Jon H <Jon.H.Bloomberg@xcelenergy.com>; Bodry, Renee A <Renee.A.Bodry@xcelenergy.com>; Reeves, Molly <Molly.Reeves@hdrinc.com>; Rohr, Matthew <Matthew.Rohr@hdrinc.com>; Munoz, Emily <Emily.Munoz@hdrinc.com>
Subject: RE: Comanche Phase 2 drilling update

Treasure, please note correction -
TH-185 is set in the colluvium just on top of the weathered shale (weathered shale starts at about 5 ft in that area)

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From: McCarter, Jennifer
Sent: Friday, December 18, 2020 10:08 AM
To: Bailley, Treasure <Bailley.Treasure@epa.gov>; Jacobson, Linda <Jacobson.Linda@epa.gov>; Churchill, Stephen <Churchill.Stephen@epa.gov>
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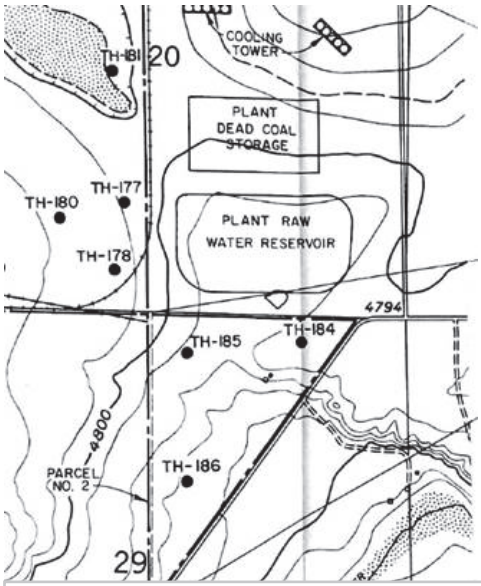
Subject: Comanche Phase 2 drilling update

Hello Treasure, Linda, all – following is a summary of the Phase 2 drilling at Comanche Station. All data is preliminary/from field notes, pending completion of development and preparation of well logs. Five new monitoring wells were installed east and south of the bottom ash pond. Geotech hole (W-10) by proposed treatment system area is a temp piezo only. Figure below shows approximate locations (until surveyed), depths and/or screened intervals and the post-installation water level. All wells are screened in weathered shale bedrock. HDR also located two of the 1987 Woodward Clyde borings, both of which are dry.
Water levels as of Wed. 12/16 with development updates as of 12/17:

- W-5B 8.65 ft bgs
- W-9 33.27 ft bgs
  - 12/16 initiated development; purged dry after 19 liters;
  - 12/17 purged dry after another 19 liters; still turbid (>1,000 ntu) but improving)
- W-10A dry
- W-10B 25.41 ft bgs
  - 12/17 purged dry after 6 liters, still very turbid (over 1,000 ntu)
- W-11 20.73 ft bgs
  - 12/17 purged dry after 84 liters, still turbid ~ 1,000 ntu.
- W-12 19.46 ft bgs
  - 12/17 purged dry and recharged completely; purged again for 60 Liters total; turbidity in the few 100's ntu.
- W-13 dry 29.34' bgs

Woodward Clyde borings (1987) field located this week

- TH-184 dry 16.62' bgs (alluvium)
- TH-185 dry 5.91 ft bgs (unweathered shale)



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